

# Participant-Observations of "Effective Dialogue" at a NASA Center: Toward a New Paradigm

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## Abstract

*Four recently instituted "dialogic" communication forums at a NASA center are described and analyzed. Their discourse is compared to a (typical) paradigmatic model of dialogic discourse principles. It is argued that dialogue which does not fit the exemplary model may nonetheless be effective for building community, investment, and democratic exchange. The study further suggests that consensus and teamwork may be less evident (and perhaps less effective) than individual voice and oppositional stance.*

## Background

Dialogue is a utopian word, a newly resurrected god-term invoking communication, communion, community, democracy, affirmation, voice. It is not surprising that the concept of dialogue has found its way into the corporate workplace, as well as into many other institutions and practices of Western modernity.

Last spring at an ICA conference, Bill Issacs of MIT, who is arguably dialogue's premiere exponent, championed dialogue as an essential tool of inquiry for the learning organization--crucial in today's business culture when, as he claims, "all organizations can really offer their employees anymore is a learning ethic" (1995; see also Issacs, 1993).

Is dialogue the Habermasian ideal speech situation for today's workplace? A number of us who heard Issacs speak raised objections to several of his claims: Participation in a public exploration of personal assumptions requires a high level of trust and psychological health, Issacs' grounding of dialogue in science rather than in social constructionism troubled some of us, and others of us who had seen the backhand of power follow through when the dialogue was over suggested that dialogue is a wonderful thing except for its consequences. Many of us felt that the jury was still out--no one really knows whether dialogue works in the workplace or not.

I'd like to offer some observations about the strengths and weaknesses of this utopian mode of discourse based on my own experiences as a trained facilitator of teams and discussion groups, as an operator of an upward communication system called Dialogue, and as an observer of what I will suggest are instances of dialogic communication in my workplace--NASA's Jet Propulsion Laboratory. I hope that my examples will illustrate some of the consequences of dialogue in my workplace, which I will argue are beneficial, not without problems, and not fully understood.

## Introduction

There are many pressures facing JPL (the Lab), which has been in a downsizing mode since 1992. The Lab is a NASA center, chartered with unmanned (the politically correct term for this is now "unpiloted") planetary space exploration. Like other NASA centers, the Lab has felt the effects of the public's disenchantment with bearing the costs of an

expensive space program. The Cold War environment in which NASA thrived is over--we won the race for space and we've been to nearly all the planets. In addition, earth-orbiting telecommunications has become a booming market--other industries are now making spacecraft and have become NASA's competitors. There was a recent memo widely circulated in NASA suggesting playfully that we ought to downsize the solar system--Mercury and Venus are redundant, Neptune uninteresting, and Pluto just too far away. Downsizing at the Lab is a reality. As the result of a NASA-wide "zero-base" study, the Lab has been requested to cut its 6000 work force in half by the year 2000.

The Lab has to change and is now struggling with how to talk about doing so. In 1993, employees identified communication with top management as among the most unsatisfactory aspects of the Lab. Based on a Lab-wide survey, employees made clear to managers that they wanted more accountability for decisions affecting them, including more information on the criteria upon which decisions were made. Employees also sent a strong message that they wanted more influence in these decisions.

Dialogic communication practices evolved at the Lab in a number of formats, including Town Hall meetings, open door policies, process-improvement teams, management by walking around, Director's lunches, skip-level meetings, email discussion groups, and other innovations. I want to focus on four of these, three of which I have played an active, enabler's role in.<sup>1</sup> Two of them are face-to-face, and two are computer-mediated.<sup>2</sup> The Forum is a Lab-wide email bulletin board, and JPL Dialogue is an email upward communication system operated by me. I will also discuss process-improvement team discourse, and the Strategy Dialogue sessions that followed in the wake of the Laboratory Director's Strategic Plan. (I will set the context and note the unintended consequences of that final forum and Juanita Walker will expand on my analysis in her accompanying paper.)

The Lab underwent a TQM education program in 1991, where employees were first introduced to the concepts of empowerment, including constructive criticism. In 1993, the same consulting company hired to develop the Lab's TQM program was brought back to retrain Lab managers in "new leadership" principles. The program was based fundamentally on the work of Peter Senge and included a component on the importance of dialogue.<sup>3</sup> Gabrielle Ganswindt, a consultant, developed the seven principles of dialogue taught to managers, based largely on the work of Issacs (see ODI, 1994). Here are her seven principles:

- (1) Speak for yourself
- (2) Build upon what has been said
- (3) Listen-->really listen
- (4) Be aware of your own response to what is being said and sit with it for awhile

<sup>1</sup> Edgar Schein has suggested that one learns best about organizations when one is actively involved in helping to solve real problems in them (1991, 247).

<sup>2</sup> As I argued in my dissertation (Nelson, 1994), following Bakhtin, dialogic communication does not necessarily mean people sitting in a circle in a room. For Bakhtin, what constitutes dialogue is two or more people speaking about the same subject from differing perspectives, and this does not necessarily have to occur in the same space/time. I think any of us who are fluent with email are aware of its tremendous potential for building relationships and communities. (Indeed, had Jacques Derrida been sitting in the room at ICA listening to Bill Issacs talk about dialogue, he might have pointed out the phonocentrism and "cult of presence" implicit in many of Issacs' tenets.)

<sup>3</sup> As Stan Dectz has noted (1995), there is no dearth of methods and models for democratic communication. Similar paradigmatic listings are offered by Issacs (1993), Schwarz (1994), and by Cissna and Anderson (1994), among others.

- (5) Suspend certainty
- (6) Do not encourage disconfirming information
- (7) Focus on inquiry rather than advocacy

I have coded the discourse that follows based on these principles. The coding (+1) for instance means that the statement follows the principle of speaking for oneself and the coding (-1) means it does not follow that principle.<sup>4</sup> Does dialogic discourse at the lab live up to these principles? I don't think so. Does it work anyway? Maybe.

## JPL Forum

The JPL Forum, an internal Labwide email bulletin board, has been operating since 1993. It averages anywhere from 10 to 30 messages a day, depending on if there is a hot topic going. The policy of the Forum is posted regularly and states that it is for Lab business only,<sup>5</sup> but common postings include searches for vanpool and softball league members, lost and found items and pets needing homes, announcements of computer components available or wanted, and other useful shared information. Recently there has been both a technical discussion about how to fix the Galileo spacecraft's high-gain antenna and whether or not the Galileo project people should have been given special parking privileges by management. It is my impression and the impression of others that the Forum is widely read though we have no numbers to back this. The Forum was anonymous when it first started but fear of the potential for being sued due to the possibly libelous material that began appearing on it prompted Lab management to shift the policy to attributable posting. Nonetheless, the Forum has remained a controversial and contestable arena for open observation and assessment of lab policies and management decisions.

What is most interesting to me about the Forum other than its actual discourse is top management's silence on it and about it. Only one project leader and the TQM administrator regularly respond on the Forum. None of the Executive Council members post on the Forum nor will they admit to reading it. Thus the management questions and criticisms raised on the Forum go largely unanswered.<sup>6</sup> I think it is important to note that the Forum is thus a somewhat illegitimate communication channel and the perception I and others have is that it is unvalued as a source of communication or feedback and simply "tolerated" by management.

The Forum had two interesting recent dialogues going on: one was about a new same-sex partners benefits policy that drew a heated debate and a wide range of responses. Here's an example of one interaction:<sup>7</sup>

> (lots and LOTS deleted) (-2)  
 >  
 > WHY, has Caltech-JPL chosen to deny that heterosexual unmarried couples  
 > have exactly the same feelings and needs as married couples, and gay

<sup>4</sup> Principle (4): Be aware of your own response to what is being said and sit with it for awhile, is difficult to code in email interaction, but from my experiences with process-improvement discourse, as well as the amount of "flaming" that occurs on the Forum, I will make the claim that it rarely happens.

<sup>5</sup> Forum Policy: Use of this forum must be appropriate for government property (JPL, business only) and observe the rights of others (no defamation or harassment).

<sup>6</sup> And for this reason many of them are passed onto me as JPL Dialogue questions, where they will receive an answer through a moderated channel.

<sup>7</sup> I have shortened some of these postings where indicated in brackets but have left in grammatical, spelling, and syntax errors. The carets in the left margin indicate that material has been copied from a previous posting.

>couples? (-1) Doesn't Caltech-JPL have the same responsibility to  
>them that it has to the married and gay couples?

Are gay marriages legal? I'm not sure, but I don't think so. IMHO, if  
I'm right, then I JPL's being very reasonable here; if I'm wrong, then  
you're griping 's legitimate, (+7; +5) though still verbose. (-2; -4)  
(signature)

(New response:)

My question is this: Why has this new benefits policy been allowed to  
occur at all? The new policy just opens a pandora 's box for all sorts  
of abuse. How can we prove that one person is truly dependent upon  
another for their health care insurance if there's no legal contract  
(i.e. marriage)? Do we send investigators out to the person's home to  
see if they're really living together?? Or, do we interview friends of  
the candidates to see if they've truthfully responded to the  
requirements??? (-5; -6)

From a moral point of view, I am really dismayed by these reforms. By  
promoting these policies, our workplace is encouraging a life style that  
flies in the face of traditional ethical and moral values held by  
Christian and most other religions. This is truly a reflection of the  
breakdown of the traditional family unit, and the erosion of the  
morality of our society. What's next?! (signature) (-1; -5; -7)

(New response, repeating the previous posting and ending with):

>What's next?!

Theocracy? (+2; +7)

The thread I want to focus on in more depth concerned the annual raise, which was actually  
the first since 1993.<sup>8</sup> The thread generated more postings than I have room to reproduce  
here, The dialogue began with this posting:

I want. to return my raise (and that's putting it mildly and politely)!  
I worked in this institution for thirteen years. I am very happy with  
the task I am given an opportunity to manage. I like the people who work  
with me. I like the people I work for. In short, I like my job. I do  
not, however, think that the compensation I am being offered is  
commensurate with . In fact, I don't think it has anything to do with  
much of anything.

I am pretty well educated, I am quite able, have experience, I consider  
myself to be a professional, AND I DON'T THINK THAT [amount deleted by  
me] PER HOUR INCREASE IS SOMETHING I CAN POSSIBLY BE SATISFIED WITH! ! !

Again, I think of my customers, and ask myself if they are happy with my  
performance? Well, they say they are. Is my line management unhappy with  
me? No they say quite the opposite, they are quite pleased. Is my chosen  
field not part of the "core capabilities"? Well, I have graduate degrees  
in Project Management and in Engineering. The field seems to be all

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<sup>8</sup> The Director mandated a 0% raise policy in FY1994, amongst other reasons, as a public gesture  
acknowledging NASA's leaner times. Nonetheless, claims by employees that JPL salaries are below  
industry average are not substantiated by benchmark data from JPL compensation studies. I do not mean to  
imply here that any claims made in this exchange are necessarily factual or that Lab employees as a whole  
are underpaid.

right. So why is it, that. people who plan to have me work on their tasks always assume that my base salary is at least 30% higher than it actually is? And I always feel ashamed when I tell them. They think my E level [job ranking] should be a couple of notches higher also.

When I plan other peoples labor hours (I have been managing tasks for ten years) I find no correlation between ability and salary either. (I have no doubt that I am not the only one in this predicament.)

My friends from school are all making more money than I do. [. . .] What is wrong with this picture?

If JPL salaries were capped at 20k per year. That's it. Take it, or leave it. I might take it, but then I wouldn't be ashamed. I'd say that I am an idealist, I like my job, I am making an important contribution to something I believe in, and I feel good about it.

Well, I don't feel good about it now! And I don't think that [a larger] per hour increase would have made much difference. [. . .]

Well, Ladies and Gentlemen, I can count, (I even have a Math degree) and THERE IS NO WAY IN HELL I CAN EVER BE PROMOTED GIVEN THE CURRENT SYSTEM!

So, I want to, respectfully, decline the generous raise from this institution. And until my salary is properly evaluated and EXPLAINED to me, along with a description of a possible promotion path, I would prefer to continue receiving my FY 94 rate.

I hope, that my action would be viewed as a civil protest from a loyal, and dedicated employee. Maybe the money could be spent on further beautifying the Mall area by pouring more concrete. [Another controversy] Thanks for hearing me out, and please, let me know your opinion.  
Sincerely, (signature) (+1; +6; -7)

#### (Response)

Bravo !

Last year my group supervisor and I calculated how much longer it would take me to get to E-5, having been an E-4 for 2 years already. Assuming that I continued to get above average raises and was close to the top of the ranking, it would only take 12 MORE years! Sooooo, I should finally get that cherished promotion about the time I get laid off because the Cassini mission is finished.

(signature) (+1, +2; -7)

#### (Response)

As a 40-year JPL employee, I have learned long ago to disregard comparisons to what people make in other companies . . . or even other FFRDC's. I work here because I enjoy working here.

I balance out my JPL work with involvement in many other outside activities: home, church, hiking, biking, ski club. When I feel unappreciated at JPL, I focus on something else.

Pollyanna? Head-in-the-sand? Maybe so. But I'm not suffering any anguish over the amount of my raise. Life's too short!

(signature) (+1; -2; -7)

(Response)

Dear [...],

Please donate your entire year's salary to the raise pool. From what you say your amazing sense of self-worth can only increase as your salary decreases. Life may be too short but mine has many bills that will take a long time to pay. The cost of living continues to rise, you know. You may have been here 40 years and simply succumbed to the "only a little while longer to retirement." mentality. You may want to hurry as Section 090 [outplacement- services and benefits for laid off employees] can't last much longer and you may not be able to cash in this "benefit" that may well disappear.

When you donate your salary we will arrange> for one of those nice NASA/JPL laser printer awards and a ceremony on the steps of 180 [Director's office]. That should nicely offset the anguish you might feel over no raise at all. I am sure that Those Who Determine Raises will be appreciative of your stiff upper lip.

Cheers! (-1, -2, -4, +5, -6, -7)

(Response)

Seems to me the the 2 viewpoints on the issue can be determined by their answers to the question "When did you buy your house?"

(signature) (+1; +2, +6)

(Response)

To all those who wish to return their raises. I would be more than happy to accept your goodwill and raises. I 'll. accept cash, checks or money orders - no problem! ! ! SMILE! (-2; -3;)

(Response)

Just for grins, here're the salary ranges gleaned from the job employment listings from before and after the recent raises. [ . . . ]

The increase in about every case rounded to the nearest tenth is] [...] % How'd yOU do?

(Signature) (+2)

(Response)

I'll risk sounding like Pollyanna. Is anyone out there glad they have a job? I have seen many fellow employees lose their jobs through downsizing and reorganization. Some of these jobs simply went away. Many people with more years of service than I have were victims of layoffs. I had to layoff three employees. \$'sinful! I would be willing to bet that anyone of them would have accepted a small raise in order to keep f-heir jobs. (+1; +6)

What we all need to do is be thankful we have a salary and a job. I think it's time to see how innovative, creative, and responsible we can be to make JPL work more efficiently and effectively. When times get tough. . . . whining is not the answer. It's time to show what we are made of.

I think one major thing has been forgotten here - if Your situation here at JPL is not to your liking, you always have the option to do something else. No hard feelings, no bitter words, just CHOOSE another path for your life and make the best of it. None of us are forced to be here.

(-1; -2; -5; -6; -7)

(Response)

In am afraid I must respond to several recent postings from people who suggest that the best way to deal with problems in the workplace (the one I very much like) by finding another place of employment, or keeping quiet. Especially, I am concerned about one recent. posting because our perspectives are so very different. (+1.; 12; +4)

[... repeat of PP2 above]

I am perturbed for a number of reasons. First of all, it seems to me that employees, no matter what they say, do not "whine". They may voice concerns, they might make suggestions, they could protest, but they do not whine!

Secondly, I am troubled by the attitude which, in the past, lead to cases of unfair job practices, unhealthy work environments, open discrimination, and unreported sexual harassment ("be thankful you have a salary and a job" and don't whine) .

Finally, I am not at all convinced, that fear of loosing ones job due to restructuring leads employees to being more effective and efficient contributors to the changing organization. (+3; +5)

[... repeat of PP1 above]

I very much appreciate the hardship and pain of loosing ones job (14 years ago I was in a similar predicament when all employees, of the company I worked for, were terminated a day after a corporate merger). At the same time, I am afraid that the fear of a layoff due to "rightsizing" might possibly motivate these employees to put up every stumbling block (often thinly veiled) to any attempt to make the organization more efficient.

In the technical divisions, we put ourselves at risk of layoff every time we contribute to making the project we are working on "faster, better, cheaper". (If we were to make it slower and more expensive our jobs would be secure for longer periods of time, at. least until we all go out of business).

I want to be apart of a different future for JPL, an organization which is able to attract, motivate, and retain the best work force available. These people should not be afraid of losing their jobs, they can be snapped up by any of our competitors any time they want . Only, I wouldn't like them to want to leave. I hope, they stay. I also hope they will succeed in preventing this organization from becoming an arcane, stagnating, potentially sick and abusive bureaucracy, which can easily be created by those who are just thankful or lucky to have a salary and a job. (signature) (+1; -7)

(Response)

Very well said... (+2, -7)

(Response)

>"Very well said . . . . "?

Was it? I don't think so! It was unfair and untrue, the original message didn't say anything that could remotely lead one to believe that

someone thankful to have a job and thankful for their raise is leading up to telling people to keep quiet about job discrimination or keep people from not reporting sexual harassment!

Talk about a healthy work environment! (-1; -2; +3; -5; -6; -7)

(Response)

I must admit to being startled by a woman who says, "Of course we are being treated fairly. We all equally have the right to walk if we think things are better elsewhere. " Did Anita Hill's "right to walk" constitute fair treatment under Clarence Thomas? [. . .]

"Take it or walk" is such an unproductive attitude, and contributes to the cause of problems. When a time we no longer hear complaints, is the time we close off the gates. (-2; -7)

(Response)

I think we can agree to disagree - I stand by my statement, I think the response was unfair and untrue in this instance. Had the respondent simply stated that they were concerned about employees, under the current circumstances, being afraid to make waves by complaining etc. I would have respected the message as an opinion period. To go through another message and attribute motivation and attitudes that were not stated is, in my opinion, unfair. Bottom line I have trouble with misusing another person's message to make a point.

(+1; -2; +4; -6; -7)

(Response)

Since shortly after I arrived at JPL I have heard the story about a previous ALD [Assistant Lab Director] who claimed that compensation is only needed to retain quality workers. If the compensation was not sufficient people would vote with their feet. Count mine as one vote. I am leaving JPL and the primary reason is the low salary level which I had at JPL. (+1)

[...] If my one vote counts for anything, this is my challenge to JPL management. You must pay people what they are worth. Trying to match an offer from another company is too late. Adding [...] % per year is not sufficient. Relying on a re-evaluation of the salary structure that will take 2-3 years if it ever works is waiting too long. I honestly believe that the sections know who are the underpaid high achievers and the overpaid low achievers. Provide the resources to the sections to get the high achiever's salaries in line with their worth. Require the sections to reduce the overpaid. If the sections management can't or won't sign up to these responsibilities, replace them with managers who will. No matter what system is in place, it all starts with managers who have the guts to reduce the salaries of those who are not propelling us into the next century. (-1; -5; -7)

Mine is one vote. If JPL management does not fix this problem quickly, mine may just be the first of many. Good luck and thank you for 5 good years.

(signature) (-7)

(Response)

Hiya [...]



[...] The sad thing is I really think management could care less about who quits as engineers are just another commodity slated for Just In Time methods. As long as they can manage programs and contractors, your bosses won't feel any threat to their security if you quit. One contractor I know here is making [...] /year because all of the good JPL talent quit the group he is working for. What really matters to your boss is his SCHEDULE. The big Kahuna here at JPL is MILESTONES. Until you learn those words you will never make it here. 8' (-1; +2; -5; -7)

I wish you well in your new employment., you have a far more positive attitude than the complacent folks who explain how they are so used to being mistreated that they "Don't worry" and admonish you to "Be Happy!" as they leave at 3 pm to go to their 1970's mortgaged home. You are right that this place has a lot of truly wonderful job situations, but like a bad marriage, either you get both parties to seek counseling or you initiate a divorce. (signature) (-1; -6; -7)

(Response)

I would be interested in knowing how many of you know people who have been working for a company for a long period of time and are completely satisfied with all aspects of their employment. Newly hired people are usually quite satisfied with their salaries because they are usually making more than they did on their previous job. However, after a number of years, they begin having the same complaints as everyone else. I have worked for a number of years at various companies [...] and I've found that generally all employees have complaints. They may not be exactly the same, but they complain eventually. And that's okay because that can stimulate change. But there is no such thing as an employee utopia. It's a matter of what you can live with. We all have our preferences and our limits. I have seen people accept jobs for lesser salaries because the work was more rewarding and fulfilling; I have seen people accept jobs for lesser salaries because of the stress and distance of the day to day commute. I have personal friends who have accepted high paying jobs in large profit-based companies (like some that have been mentioned) where they were more than qualified for the position, and where the benefits were phenomenal, etc. , but the stress was great and created health problems, and the competition among employees created a backstabbing environment , the commute took them away from their families, and they later decided that the money was just not worth it. I have seen them leave JPL and return.

I'm not sure I made a point here or not. I certainly hope that I have not offended anyone. (+1; -2; -3; +5; -7)

(Response)

Having just read several weeks of forum posts, I think that the biggest barrier to communication on the forum is that we fail to be tolerant of differing opinions. Instead of understanding that people have different experiences, viewpoints, perceptions and values, there tends to be a belief that there exists one universal truth. And if you don't hold that truth to be self-evident, look out. I think that all of us could benefit from keeping the discussions focused on the issues and not turn them into personal attacks on others. (signature) (+1; -2; +3; +4; -5; -6; -7)

As can be seen, only one member of this discussion self-identified as a 10W-1CVC1 manager. No managers responded to the complaints, challenges, and questions raised in this discussion. Now let us see what happens in another email forum where employees are "guaranteed" a response from managers,

## **JPL Dialogue**

JPL Dialogue is a relatively new, primarily email communication channel that was developed by a problem-solving team in response to the Labwide dissatisfaction with upward communication channels reported in the 1993 survey. Employees email a question or concern to a moderator, who assigns it to a manager or process owner, receives the response, and posts it on a Labwide electronic bulletin board. Only the moderator can assign queries and post the queries and answers on the bulletin board. It is not surprising that many queries begin on the Forum and are sent to the Dialogue system so that they will get a response from management. The Dialogue system receives about 10-15 queries a week. To date, topics and issues are similar to those voiced on the Forum. One very popular topic is the Lab's environment, including questions and concerns about recycling and excessive paper use and the value added of new construction work. The following is one such thread about the Mars Yard, a test site for an all-terrain vehicle that will be landed on Mars. The Mars Yard construction was stepped up so that it would be ready in time for the Lab's semi-annual open house. There is often quite a bit of dialogue that goes on before a respondent is found and the response is finalized, as this exchange shows.

(Initial query, also posted on the Forum)

A week ago there was a young, vigorous, and beautiful ten-foot high jacaranda tree growing two feet inside the fence at the new Mars Yard, just northeast of the Library. Over the weekend, that tree was chainsawed an inch from the ground. There is nothing left. I'd like to find out what the irresistible burning necessity was to destroy that tree. Mars Yard is, after all, only a play yard for Open House. We're not talking national security here, and the Arroyo has served quite well in the past for testing rover-type vehicles. If pure airless-planet authenticity is needed, will the chain link and barbed wire fence be removed also? How about the adjacent pine trees? How about the adjacent buildings? What reasoning, if any, went into this decision? In every likelihood, that tree would have been around after the youngest present employee of JPL had long retired. Perhaps even longer than it will take to accomplish the first human landing on Mars. Now there is nothing. And for no sensible reason. Keep cutting trees down, and Mars Yard is what Planet Earth is going to look like. (-1; -5; -6; -7)

(To Stephanie [...], Grounds Maintenance group supervisor, from the TQM administrator [who has a fondness for diminutives])

Steffie, this does not sound like a decision you'd make, and I'm wondering if it was accidental, the result of a miscommunication of some kind. Hope all is well with you -- (signature) (+1; +2; +3; +4; +6; +7)

(From Stephanie [...], also posted on the Forum)

Whoever removed the tree did so without consulting me or anyone in the Grounds Maintenance Group. I don't know why it was cut down, but I am investigating. I am hurt and angry both personally and professionally by the unnecessary destruction of a beautiful living thing. The youth, health and size of the tree made it a good candidate for successful relocation. Respect for the environment begins here with each of us. (+1; +2; +4; -5; -6; -7)

(Joint response to (1) Mars Program Director and (2) Stephanie from TQM administrator)  
[...].I just had a call from Stephanie [...], who is supervisor of Facilities Ground Maintenance Group and the individual with whom I've exchanged the messages below. She's also JPL's one and only landscape architect and a person who creates a lot of beauty at JPL for all of us to enjoy. It's about the tree cut down in Mars Yard.

She tells me they do not know who killed the little blue jacaranda but are asking themselves if the tree was interfering with the Mars Project in some way, perhaps resulting in some enterprising Martian taking an axe to it? If so it was a crime because the Grounds Group would gladly have moved the tree. It was young enough to transplant.

I asked her whom she worked with to place rocks in the Mars Yard and she said [...], but he wouldn't do that and is her neighbor to boot. She feels timid about approaching you -- I assured her that I don't think you'll stand for it if someone on the Mars program has destroyed JPL property and will prefer she talk with you. She's still feeling a bit anxious so I said I'd message you. Her number is [...] (signature) (-1; +2; +5; +6; +7)

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Stef -- I too love the blue jacks and surely hope you're able to learn what caused the action to be taken (particularly while you were away) so the problem can be prevented from recurring. Can another young tree be obtained to replace it? I would be glad to fund its procurement to restore a living thing. That's important., if you want. it done.  
(signature) (+1; +2; +3; +4; +7)

(From Mars Program Manger)

[...]-I have NOTHING to do with the Mars Yard. It is part of the rover technology program. Please address questions to [...]  
(signature) (-2)

(From the Rover Technology manager)

Stephanie:

The MarsYard was sponsored by my office (Robotics and Mars Exploration Technology of TAP) to provide a large outdoor test: area in which to conduct simulated technology experiments in support. of future Mars missions (It should be ready by Open House). I had not. been informed of any issue regarding a Jacaranda tree and am unaware of who/how it was taken down and along with you, consider it regrettable. I would join with [the TQM administrator] in sponsoring replacement trees at some appropriate site, and will discuss the matter at our next. staff meeting to avoid having it happen again in the future. (signature)

(From the Rover Technology manager to me for posting to the Dialogue bulletin board in response the the original query)

Your concerns over the removal of the jacaranda tree located within the Mars Yard are well founded. It was an unfortunate decision made on the spur of the moment to expedite construction, and all those involved, in hindsight, expressed deep regret about. the incident and assure us it will not happen again. The Grounds Maintenance Group should have been involved, and I know would have been happy to safely relocate the jacaranda had they been consulted. The Program Office has offered to try to provide resources to allow for planting something suitable which will serve to brighten our environment and bring this discussion to a

positive conclusion. I suggest we'll all be better off now if we consider this as an unfortunate situation not to be repeated.  
(-1; +2; +3; +6; -7)

(From Stephanie to the sender of the original query)

[.1:  
I think we have good resolution of a regrettable mistake. Hopefully, it will never happen again and something good has taken root. Many thanks for your first Mars Yard post. [. . .] Stephanie (-1; +2; +3; +4; -7)

(From the original inquirer to Stephanie)

My idea of a good resolution is the miscreant nailed to a cross planted in the middle of Mars Yard during open house. With a sign on the cross saying "This is what happens to people who cut trees down for no good reason". Worked for generations of Catholic school kids, and it works for me. (+1; -2; -3; -5; -6; -7)

As a postscript, the jacaranda tree decided not to take no for an answer and has resprouted and is now about a foot tall. It is enclosed in white plastic so that it will not interfere with the realism of the Mars terrain simulation and it seems to be thriving.

## Process-Improvement Teams

The next two dialogic communication forums are face-to-face. The first set of comments are general examples and impressions stemming from my observations as a process-improvement team facilitator. After attending an initial week-long training program from the same consulting company who developed the TQM training and new leadership programs, I have been facilitating for more than 3 years and have many hundreds of hours of experience facilitating over 10 teams. My observations are supported by Juanita Walker's dissertation research on process-improvement teams at the Lab, in which she did a close discourse analysis (Walker, 1994).

Process-improvement teams at the Lab have a generally bad reputation, primarily for taking too long to arrive at a result, and then for not fine-tuning new processes once they are implemented. A bevy of "quick fix" process-improvement teams were chartered by top management in response to key 1993 survey-identified problems, and these "quick fixes" took an average of 2 years to put into place (and some have never been implemented). Common complaints are that teams spend too much time trying to decide what to work on, and that the consensus model of teamwork leads to a slow and agonizing "two steps forward, one step back" method of progress. There are also the common problems of getting busy people who have other priorities into a room a critical enough percentage of time for team continuity. Team members I have facilitated often show clear signs of boredom or frustration at lengthy discussions needed to bring all members up to speed or to elucidate all team members' views. Reviewing and interpreting material as a team also takes a great deal of time. Varying levels of commitment to the team and availability to take on work outside of meetings is also a common issue. When, in the spirit of representing all sides of the process, various stakeholders are invited to be members, there are often power struggles and deadlocks as members fight over turf and authority. My overall experience as a facilitator is that there is often a palpable sense of frustration in the room by the end of meetings, and that this frustration is more likely to be voiced and challenged as a way of working than in traditional hierarchical meetings.

Other difficulties with process-improvement teams have less to do with a team's discourse and more with its "container" or "field," in Issacs's terms. It is one thing to try as a

facilitator to make possible a safe haven for (team members to “speak the utmost syllable of their convictions” (Emerson, 1926), but teams rarely operate in a politically free and (never in) a power free environment. Outsiders who will be affected by the outcomes of teamwork pressure the team for information and favoritism. Managers often have other agendas in mind when they charter [teams--in the case of two teams I facilitate now, one was apparently chartered to take sides in an argument between a manager and a subordinate supervisor about service areas that were not self-supporting in revenue, while another “re-organization” team was chartered by a manager who wanted a less self-implicating reason to get rid of a troublesome subordinate supervisor. The team and I can eventually uncover these agendas--often well into the problem-solving process--and I consider it part of my covenant as a facilitator to do so, but my position grants me limited power to ask tough questions and demand honest answers of process owners. I recently told a process owner that I felt it was unfair of him to ask my team to make a difficult and unpopular decision about downsizing, since as a manager he and his supervisors got paid to make those decisions and were perfectly capable of doing so without the team’s sanction. I felt this was my responsibility to the team as its facilitator but he is also my boss, and I waited until my promotion had been signed off by him before having this little chat.

Under similar kinds of pressures, I have seen team members withhold information from one another, prematurely leak contested options under consideration to those who they knew would oppose them, dig in their heels and refuse to hear other options about issues that threaten their personal turf or networks, question or undermine my authority or the authority of the team leader, and, most commonly, express dislike for the process or make deprecating remarks about other team members outside of the meetings. A team leader quit in the middle of the solution phase, discouraged that his present management, even though they had chartered the team, would ever implement any changes, let alone the changes suggested by the team. Another team came up with a brilliant solution that was accepted but has never been implemented by the process owner. After one team member pounded the table and whittled at a chair with his pocketknife during a heated exchange, his opponent asked me if he could bring his revolver and spin the chamber in the next meeting. An inspector whose signature was eliminated from a re-designed process deliberately held up an approval on a piece of equipment submitted by a member of that re-engineering team. A team member who was asked to decide about eliminating her own work area and those of her close colleagues was silent in meetings but told a process improvement methodologist that we were misusing the teamwork tools and that she was being “railroaded.” (I had attempted to exclude her from the team in the first place, arguing that she should not be put in the position of eliminating her own job, but my recommendation was vetoed by the process owner.)

While team members generally take pride in and are satisfied with their collectively formed solutions, it is a long, slow, labor-intensive, and frustrating process. I often find myself running a tremendous amount of interference and doing a lot of strategizing outside of meetings in order to get to the place where we can have productive interchanges once we get into the room. And finally, while some very good and innovative changes have come to the Lab as the result of process-improvement teamwork, some very slow, obvious, or not so great solutions have been generated as well, and I have yet to see the increased “buy-in” to change that this methodology is purported to effect. In other words, the jury is still out, in my opinion, as to whether process-improvement teams are more effective organizational change makers. I speak here as one of the most experienced and successful facilitators we have at the lab.

## Strategy Dialogue Sessions

Earlier this year the Lab Director rolled out his Strategic Plan at a Town Hall meeting. The plan, which he maintained was driven by our NASA sponsors and the environment, identified ten "change goals." The Director and the Lab's top managers asked Lab employees to participate in collective problem-identification forums which were called Strategy Dialogue sessions. Lab managers had been passing around a video by MIT consultant Fred Kofman called the Heart of the Learning Organization. In that video, Kofman enticed viewers to ask one another what "ails" them. The purpose of the strategy sessions was similar--lab employees were given the opportunity to voice their pain, frustrations, problems, and suggestions for getting from where the organization was now to where the Director wanted it to be in the future. Each of the ten change goals was "championed" by one of the ten Executive Council managers and facilitated by a trained and experienced TQM facilitator (I was one of these facilitators). Employees signed up voluntarily for 1-1/2 hour brown bag sessions on the topic or topics of their choice. These meetings were well attended and a tremendous amount of data was generated, some of which Juanita has been wrestling with and will tell you more about in her paper. We were asked to present the data in a structured format and a team was appointed to sort the data into identifiable problem areas or issues. It was the Director's intention that he and the rest of the Executive Council would then select the most pressing issues and appoint several re-engineering teams to address them. However, a curious thing happened, which I call the Lab's crisis of representation,<sup>9</sup> that caused management to rethink this selection process.

First, a few words about the Dialogue sessions themselves. Our roles as champion and facilitator were to keep the dialogue focused on the topic, make sure everyone got a chance to talk, record what we were told, and evoke further information if needed. Essentially, we were there to bear witness to the collective unburdening of employees about what was holding them back at the Lab. It is my impression that, while managers were initially uncomfortable with this process, once they began to understand that they were not answerable for these problems but simply there to empathetically encourage their expression, they enjoyed the sessions. According to Senge's taxonomy, these sessions could be considered the most dialogic of the discourse I've discussed so far, because their immediate purpose was not to solve problems but rather to promote open inquiry and explore dissatisfactions.<sup>10</sup>

What interested me most about the sessions was the instances that I will call "voice." These were instances when employees either shared an opinion grounded on personal experience or vented generalized frustration with managers. This interested me because I think it got largely lost from the information ultimately presented based on the way we were instructed to roll it up, but it is my experience that it occurred quite often in the sessions I facilitated and that it served to increase commitment to the strategic plan without concretely contributing to problem-solving activities. One example is an old-timer who came to two of our meetings and insisted that the Lab needed to be run as a "fine anarchy, managed by walking around." This claim was grounded by a detailed exposition of how the Lab had been run 30 years ago (that it became my job to foreshorten as gracefully as I could). Despite our evident frustrations with the length of this speaker's expositions, he returned to the next session with the same set of stories and was determined to take this opportunity to tell them to us again. Without our prompting, personal experience was by far the most

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<sup>9</sup> Meaning that, as anthropologists have learned, if you ask someone to tell you their story, they want to have a say in what gets done with it.

<sup>10</sup> "It is best to approach dialogue with no result in mind, but with the intention of developing deeper inquiry, wherever it leads you. . . . The safety of dialogue comes directly from the willingness to touch the dangerous" (Senge et al., 1994, 375).

often used grounding, when grounding was used at all. The other type of comment I heard fairly often used no grounding and was so general as to be useless for problem solving--yet it was also an example of voice, and I think it enhanced commitment to change. One administrator admonished us, "use common sense, people, just use common sense." When I asked him to specify what he meant by this, he replied, "just what I said, just use common sense." Similar comments included "negative" asides like "dream on--it'll never happen here." These type of comments may seem unproductive and easily slip through the cracks of reporting but I think they show a level of involvement and comfort of expression that is important.<sup>11</sup>

The strategy sessions were also carried out virtually through a newsgroup, and hundreds of employees participated. In the sessions and on the newsgroup, employees consistently expressed concern about what was going to be done with their input. Overwhelmingly (and not surprisingly) they wanted to have a say in what processes were selected for re-engineering. While the Director of the Strategy program insisted to me and others that this was not intended to be a democratic process and there was not going to be a Labwide vote on which processes got re-engineered, eventually managers reversed themselves and there was indeed a vote. About 25% of the lab voted and the three processes chosen for reengineering were announced at a Town Hall.<sup>12</sup> One of them concerned Lab project infrastructure but the other two were decidedly employee empowerment issues-- "growth and assignment of our people" and "rulemaking."

### **Conclusions: Not Quite Ready for Dialogue**

The outcome of my coding scheme suggests that exemplary principles of dialogue are rarely followed in dialogic discourse situations at the Lab. People often speak for others rather than solely for themselves, people often negate what has been said by others (or ignore it), people react without self-examination into the source of their responses, people become entrenched in positions and are not open to other views, people become defensive about their views when faced with conflicting information, and people champion their own ideas rather than inquire collectively in groups. When we meet in groups and work in teams at the lab, I still see individuals--wanting to be identified, recognized, and affirmed as such. Dialogue seems most often to be more about who we are *not* and what we *oppose* than who we are and where we stand. Perhaps this is due to the individualistic paradigm for learning that technical specialists and scientists are taught, which is to identify a problem and come up with a solution on one's own and then walk into a meeting or design review prepared to defend the efficacy of one's solution. The idea of exploring and solving a problem collectively in a meeting is still very foreign to many disciplines represented at the Lab (it is certainly not a paradigm for academics and social scientists either!).

Despite the flourishing of teams at the Lab, and buy-in from management of Senge's adage that teams, not individuals, are the fundamental learning unit in today's organizations (1990), the role of the individual remains prominent at the Lab. I begin to wonder if this penchant for teamwork in organizations is not some sort of nostalgia for a collective organizational culture (a nostalgia belied by such collectivist dog-terms current in organizational change discourse as "alignment," "integration," anti "shared

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<sup>11</sup> Indeed, Chris Argyris has argued that "dissatisfaction, low morale, and negative attitudes" can play "a critical role in giving an accurate picture of organizational reality" (1994, 85).

<sup>12</sup> I however, an additional concern was expressed at the Town Hall meeting and later on the Forum and via JPL Dialogue that team members and leaders were not representative of the overall Lab population, but were rather the "same old faces" (white male managers) and administrators rather than clerical and technical people.

understanding")--a yearning for a cohesive culture increasingly unattainable in today's diversifying and fluidifying workplace.<sup>13</sup> And I wonder if organizations aren't sending very mixed messages. After all, when I look at the want ads, I still see organizations looking to hire individuals, not teams!

In regards to the discourse of dialogue itself, I don't think the Lab as a culture is ready to frame a typical counterclaim thusly: "I can see the value in your perspective, especially in its ability to improve X, yet I am uncomfortable with Y aspect of it. I 'perhaps I am making the wrong assumptions here, but from my perspective as a Z, I see Q, because of M. Can you see what's at stake for me, and if so, can you help me to see further how your perspective will improve the scenario) 'vc just attempted to describe?" While a few of us at JPL are becoming increasingly adept at role-modeling this mode of discourse, the troops don't seem to be aligning.

Yet something exciting seems to be happening at the Lab that has to do with voice, with involvement, with the insistence upon wider representation and more presence in the decision-making process, and with a growing sense of community and responsibility. We seem at the Lab to be more comfortable speaking out about what we think we ought to be doing. A lot of times this talk looks more like a quarrel, but I think it might be some kind of a dialogue nonetheless.

### Acknowledgment

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<sup>13</sup> Edgar Schein says that if there is no consensus or if there is conflict or if things are ambiguous, then there is no shared culture. [J] 'I. fails to exhibit acceptable consensus according to any of Schein's external adaptation or internal integration measures, but then I wonder if any organizations do! (See 1991, Table 17.1, 249.)



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